

REMARKS

The Office Action addresses claims 1-11. Claims 1 and 4-6 stand rejected under 35 USC §102. Claims 7-11 stand rejected under 35 USC §103. Claims 2 and 3 are indicated as containing allowable subject matter. By the foregoing amendment, claim 1 is canceled and claims 2-11 are amended. In light of the foregoing amendment and the following remarks, the claims remaining in the application are believed to be in condition for allowance. Withdrawal of the rejections and reconsideration of the claims are courteously solicited.

The drawings are objected to as failing to comply with 37 CFR §1.84(p) (4) because reference character 26 has been used to designate multiple elements in the specification. Accordingly, paragraph [053] of the specification is amended so that the designation of a "hydraulic connection" is correctly assigned to the reference character 26. Accordingly, withdrawal of the objection is respectfully requested.

The specification is objected to because line 2 of page 4 contains the term "metered in in". The specification has been amended to clarify this language. Withdrawal of the objection is respectfully requested.

Claim 4 is objected to for containing the phrase "metered in in". Claim 4 has been amended to correct this language. Withdrawal of the objection is respectfully requested.

The claims are rejected under 35 USC §112 because they are identified as being generally narrative and indefinite, failing to conform with current U.S. practice, and appear to be a literal translation into English from a foreign document. By the foregoing, the claims have been amended for clarity and to conform with U.S. practice. Withdrawal of the rejection and reconsideration of the claims are respectfully requested.

Claims 1 and 4-6 stand rejected under 35 USC §102(b) as being anticipated by Chaplinsky U.S. Patent 5 135 174. This rejection is respectfully traversed. By the foregoing amendment, claim 1 has been canceled and claims 4-6 have been

amended to depend from claim 2, which has been rewritten in independent form and has been indicated as containing allowable subject matter. In light of these amendments, the rejection under 35 USC §102 should be considered moot and its withdrawal is respectfully requested.

Claims 7-11 stand rejected under 35 USC §103(a) as being unpatentable over Chaplinsky '174 in view of Knight U.S. Patent No. 3 716 191. This rejection is respectfully traversed.

Chaplinsky '174 discloses an automatic micro-feeding system for applying multiple plant nutrients to irrigation systems. Multiple nutrient pumps and a central mechanism are provided to inject each nutrient individually into a flowing irrigation line during irrigation, allowing for selecting the desired nutrient ratio by adjusting the output setting of each pump. Chaplinsky '174 does not teach that the active ingredient supply line is provided with a compressed air connection arranged so that during return operation, active ingredient can be forced from the active ingredient supply line back into the active ingredient tank, as required by amended claim 7. In the rejection, the Examiner acknowledges that Chaplinsky '174 does not teach this element.

Knight U.S. Patent 3 716 191 discloses liquid spraying guns for spraying articles such as automobile bodies fed in succession. The spray guns are controlled by a selectively operable valve having a plurality of liquid delivery ports and gun purging ports. The liquid delivery ports are connected one each to sources of liquid of different colors (e.g. paint), and the gun purging ports are connected to a source of compressed gas and a source of solvent. The purpose of the compressed gas and solvent is to effectively flush the spray gun between colors so that the color of the liquid sprayed from the spray gun is not contaminated or diluted by the previously used color. Knight '191 does not disclose a compressed air connection on the active ingredient supply line so that during return operation, active ingredient can be

forced from the active ingredient supply line back to the active ingredient tank, as required by amended claim 7. Instead, Knight '191 teaches that the active ingredient supply line leading to the active ingredient tank is selectively connected through the valve 1 to a feed hose 31 leading to the spray guns 32, 33. The compressed air source is also selectively connected to the feed hose 31 through the valve 1, but is never fluidly connected to the active ingredient supply line or to the active ingredient tank so that during return operation active ingredient can be forced from the active ingredient supply line back into the active ingredient tank.

Referring to column 4, lines 3-15, the valve 1 is controlled to cut off flow from the supply of paint, through the valve, to the spray gun, and then to initiate flow from the air supply port 23 to the spray gun. The compressed air thereby maintains pressure in the spray gun feed hose to maintain paint flow. The system is programmed so as to cut off the supply of paint and introduce the compressed air prior to the end of the current paint cycle, so that the compressed air forces the paint through the spray gun to finish the paint cycle and minimize the waste of paint through purging. Upon completion of the paint cycle, the valve 1 is further operated to connect the feed hose of the spray guns to a solvent source (see column 4, lines 40-43). The spray gun and supply line are further purged by the solvent with the spray guns in a rest position pointing downwards into a spray booth tank (column 4, lines 32-35). At no time is the compressed air source fluidly connected with the active ingredient supply line so as to return active ingredient from the supply line into the active ingredient tank. After the spray guns are purged and cleaned by the solvent, a final "blow of air" is then given to the guns to push out the solvent (column 4, lines 47-48). Clearly, Knight '191 does not disclose any return operation affecting the active ingredient so that it is forced from the active ingredient supply line back into the active ingredient tank, as required by amended claim 7.

The fundamental teaching of Knight '191 is to provide compressed air and solvent for purging spray guns into a waste receptacle. This is contradictory to the claimed invention, in that claim 7 proposes forcing back the active ingredient into the active ingredient tank. This is done by providing a compressed air connection on the active ingredient supply line so that during return operation, active ingredient can be forced back into the active ingredient tank. For example, in the embodiment shown in Figure 17 of the application, compressed air is introduced at float valves 168 to push back active ingredient present in the supply lines 150a to 150g into the storage tank 156. This operation is further discussed in the last sentence of paragraph [082] and in paragraph [089].

In light of the above discussion, it is clear that Knight '191 does not disclose the element of a compressed air connection on the active ingredient supply line, arranged so that during return operation active ingredient can be forced from the active ingredient supply line back into the active ingredient tank, as required by claim 7. As acknowledged by the Examiner, this element is also not disclosed by Chaplinsky '174. Therefore, neither Chaplinsky '174 nor Knight '191, nor the combination thereof, disclose all of the elements of amended claim 7. Accordingly, claim 7 should be considered patentable over the cited references. Claims 8-11 depend from claim 7 and should be patentable therewith. Withdrawal of the rejection of claim 7-11 and reconsideration of the claims are courteously solicited.

In light of the foregoing amendment and remarks, the claims remaining in the application should be considered in condition for allowance and early notice of allowability is

courteously solicited. If necessary to further prosecution of the application, the Examiner is invited to contact Applicant's representatives listed below.

Respectfully submitted,

  
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